

13.2 Appendix 2 – Research Needs

Research needs identified during the development of the North Carolina Southern Flounder Fishery Management Plan:

- Increase fishery specific age, growth, and sex samples across all sizes with special attention to spatial specific information to better quantify southern flounder life-history and fishery specific datasets.
- Collect data on the harvest and effort in the recreational gig fishery on an annual basis.
- Develop an annual fishery-independent survey (CPUE) for inshore adult flounder.
- Obtain discard estimates from the commercial fishery, as well as from the recreational gig fishery.
- Develop an age-specific natural mortality rate for southern flounder to improve estimates of recruitment and total population abundance.
- Examine southern flounder maturation on a regional level.
- Investigate the potential for a portion of the flounder population to remain offshore following the spawning period, thus avoiding fishing pressure.
- Collect selectivity data for large mesh gill nets of varying mesh sizes.
- Increase at-sea sampling to determine the number of undersized and oversized fish caught in all mesh sizes of actual large mesh gill net fishing operations.
- Determine mortality of the undersized fish returned to the water from large mesh estuarine gill nets.
- Expand the observer program (Program 466) to sample more areas and seasons in the State. Also, initiate an independent gill net survey in the Neuse, Pamlico, and Pungo Rivers.
- Expand the trip ticket to include more specific gear parameters, such as mesh size, to more easily identify between large and small mesh gill nets.
- Investigate gear modifications to reduce regulatory discards, including mesh selectivity studies.
- Conduct further and more intensive studies into the level of bycatch and sublegal flounder reduction in pound nets that each of the different mesh sizes provides.